

IN THE CLAIMS:

Please amend the claims as follows.

1. (Currently Amended) An integrated medication delivery system for delivering medication to a patient wherein said system is suitable for complete sterilization by a sterilization fluid, said system comprising:

a base housing;

a medication reservoir disposed about said base housing for storing the medication to be delivered to the patient;

a pump assembly supported by said base housing ~~for delivering the medication to the patient~~, said pump assembly comprising a piston that is moveable in said pump assembly for delivery of the medication to the patient and a pump housing having a pump inlet and a pump outlet, wherein said pump inlet and said pump outlet alternate between an open and a closed state to deliver the medication to the patient;

a port extending from said base housing, said port being in fluid communication with said medication reservoir and said pump assembly during sterilization to provide access for the sterilization fluid to flow into said medication reservoir and said pump assembly; and

an actuator disposed in said base housing and operatively engaging said pump inlet and said pump outlet to retain both said pump inlet and said pump outlet in said open state during sterilization such that the sterilization fluid can penetrate into said medication reservoir, said pump inlet, said pump housing, and said pump outlet to completely sterilize said system.

2. (Original) A system as set forth in claim 1 further comprising a first pinch lever disposed at said pump inlet that is normally-biased to maintain said pump inlet in said closed state, and a second pinch lever disposed at said pump outlet that is normally-biased to maintain said pump outlet in said closed state.

3. (Original) A system as set forth in claim 2 wherein said actuator moves said first pinch lever away from said pump inlet to retain said pump inlet in said open state

during sterilization and moves said second pinch lever away from said pump outlet to retain said pump outlet in said open state during sterilization.

4. (Original) A system as set forth in claim 1 wherein said actuator is operatively disengaged from said pump inlet and said pump outlet during delivery of the medication to the patient such that said pump inlet and said pump outlet can alternate between said open and closed states to deliver the medication the patient.

5. (Original) A system as set forth in claim 1 further comprising an electronic controller mounted to said base housing for controlling an amount of the medication to be delivered to the patient, wherein said electronic controller remains mounted to said base housing during sterilization.

6. (Original) A system as set forth in claim 5 further comprising an electronic display and at least one control button mounted to said base housing for interacting with said electronic controller to control the amount of the medication to be delivered to the patient, wherein said electronic display and said control button remain mounted to said base housing during sterilization.

7. (Original) A system as set forth in claim 1 further comprising a fluid flow path for the sterilization fluid defined between said port, said medication reservoir, and said pump assembly such that the flow of the sterilization fluid through said fluid flow path is continuous during sterilization of said system.

8. (Original) A system as set forth in claim 2 further comprising;

a medication inlet tube connected between said port and said pump inlet to provide access for the sterilization fluid to flow from said port into said pump assembly; and

a medication outlet tube connected between said pump outlet and said port to provide access for the sterilization fluid to flow from said pump assembly into said port.

9. (Original) A system as set forth in claim 8 wherein said first pinch lever is normally-biased to pinch said medication inlet tube such that said pump inlet is maintained in said closed state, and said second pinch lever is normally-biased to pinch said medication outlet tube such that said pump outlet is maintained in said closed state.

10. (Original) A system as set forth in claim 9 wherein said actuator moves said first pinch lever away from said medication inlet tube such that said pump inlet remains in said open state during sterilization and moves said second pinch lever away from said medication outlet tube such that said pump outlet remains in said open state during sterilization.

11. (Original) A system as set forth in claim 2 wherein said actuator comprises a base portion and first and second engagement arms extending from said base portion, said first engagement arm of said actuator engaging said first pinch lever to move said first pinch lever away from said pump inlet to retain said pump inlet in said open state during sterilization, and said second engagement arm of said actuator engaging said second pinch lever to move said second pinch lever away from said pump outlet to retain said pump outlet in said open state during sterilization.

12. (Original) A system as set forth in claim 11 further comprising a plunger disposed within said port for displacing said actuator from said engagement with said first and second pinch levers after sterilization such that said pump inlet and said pump outlet can alternate between said open and said closed state to deliver the medication to the patient.

13. (Original) A system as set forth in claim 12 wherein said actuator further comprises an actuation arm extending from said base portion between said first and second engagement arms, said actuation arm being engaged by said plunger to displace said actuator from said engagement with said first and second pinch levers after sterilization.

14. (Original) A system as set forth in claim 13 further comprising an electronic controller mounted to said base housing for controlling an amount of the medication to be delivered to the patient, wherein said electronic controller remains mounted to said base housing during sterilization.

15. (Original) A system as set forth in claim 14 further comprising a control contact disposed at a distal end of said actuation arm away from said base portion, said control contact activating said electronic controller when said actuator is disengaged

from said first and second pinch levers thereby permitting said pump assembly to operate for delivering the medication to the patient.

16. (Original) A system as set forth in claim 1 further comprising a plunger disposed within said port for displacing said actuator from said operative engagement with said pump inlet and said pump outlet after sterilization such that said pump inlet and said pump outlet can alternate between said open and said closed state to deliver the medication the patient.

17. (Original) A system as set forth in claim 1 wherein said actuator comprises a base portion and at least one engagement arm extending from said base portion, said at least one engagement arm of said actuator operatively engaging said pump assembly to retain said pump inlet and said pump outlet in said open state during sterilization.

18. (Original) A system as set forth in claim 17 further comprising a plunger disposed within said port for displacing said actuator from said operative engagement with said pump assembly after sterilization such that said pump inlet and said pump outlet can alternate between said open and said closed state to deliver the medication the patient.

19. (Original) A system as set forth in claim 18 wherein said actuator further comprises an actuation arm extending from said base portion between said first and second engagement arms, said actuation arm being engaged by said plunger to displace said actuator from said operative engagement with said pump assembly after sterilization.

Claims 20-178 (Canceled)

Please add the following new claims.

179. (New) A system as set forth in claim 1 wherein said actuator is spaced from said piston to operate independently from said movement of said piston.

180. (New) A system as set forth in claim 1 further comprising a motor operatively engaging said piston for moving said piston within said pump housing to

draw the medication into said pump housing and to displace the medication from said pump housing.

181. (New) A system as set forth in claim 180 wherein said piston comprises an actuation end and a pumping end with a diaphragm seal disposed at said pumping end.

182. (New) A system as set forth in claim 181 wherein said actuation end of said piston comprises at least one slot, and said pump housing comprises at least one detent engaging said at least one slot to prevent unwanted rotation of said piston as said piston is moved within said pump housing by said motor.